

## Are More Livestock Hitting the Road?

Recent concerns about the safety of the U.S. food supply and the potential for bioterrorism, as well as incidents like mad cow disease in Canada, have prompted a new look at livestock movements. The potential for transmitting disease—whether due to bioterrorism or a natural occurrence—increases when animals mix with other animals at a variety of locations. An important early step toward a cost-effective public strategy for managing such risks is to understand livestock mobility. Why are animals shipped long distances, and are livestock being moved more now than in the past?

Animals are often shipped long distances because doing so is frequently cheaper than shipping the feed needed to

reach slaughter weight to the animals. Shipping livestock enables the efficient use of feed and forage (grass or hay) supplies that vary by region and season. This is most apparent when animals are moved from growing areas to finishing areas (where livestock are fed to slaughter weight) and then to slaughter plants.

Shipments of hogs, in particular, have increased dramatically—from under 10 percent of total (December 1) inventory in 1990 to more than 40 percent now. This increase reflects significant feeder pig imports from Canada, and the development of the hog industry in North Carolina and other States outside the Corn Belt. For example, pigs born in grain-deficient North Carolina may be weaned and moved to a growing/finishing facility in Iowa, where they consume corn, soybean meal, and other feeds grown nearby. Then, they may be shipped to slaughter plants often closer to major consumer markets in the U.S. and to export locations.

In contrast, cattle and sheep shipments have remained fairly steady at about 20 percent of inventories. Movements of cattle occur throughout the country, but especially into (and within) the Northern and Southern Plains. The top four cattle



Grant Heilman/Grant Heilman Photography

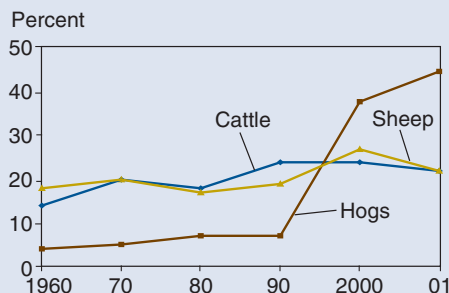
feeding States (Texas, Missouri, Nebraska, and Colorado) account for 65 percent of the feeder cattle supply and more than two-thirds of cattle slaughter. Sheep shipments have declined sharply since the early 1990s as the U.S. inventory continues its long-term decline. Colorado and California—two major sheep feeding and slaughter States—account for almost two-thirds of total interstate shipments. *W*

**Kenneth H. Mathews, Jr.,**  
kmathews@ers.usda.gov

### This finding is drawn from . . .

*Interstate Livestock Movements*, by Dennis A. Shields and Kenneth H. Mathews, Jr., LDP-M-108-01, USDA/ERS, June 2003, available at: [www.ers.usda.gov/publications/ldp/jun03/ldpm10801/](http://www.ers.usda.gov/publications/ldp/jun03/ldpm10801/)

### Livestock shipments as a share of national inventory



leading supplier by 1996 and reached a 38-percent share in 2001. China's exports included broccoli, onions, and asparagus, competing with leading U.S. vegetable exports.

Similarly, China's share of Japan's import market for processed vegetables and fruits more than doubled in the 1990s to reach 53 percent in 2001. The U.S., however, remains a strong competitor in the Japanese market for frozen potatoes and processed sweet corn, where China is not a player. Overall, the U.S. share of Japan's import market stood at less than 19 percent for fresh vegetables and 21 percent for processed products in 2001. The respective shares for other countries in the Japanese market were 43 percent and 26 percent in 2001.

China's rising vegetable exports to Japan were bolstered by many factors. With its low production costs and geographic proximity to Japan, China attracted foreign investment, especially from Japanese trading companies. These businesses provided the seeds, spores, and

production/packing techniques, and imported the harvest for Japanese retailers. Improved ocean freight service from major Chinese ports to Japan also increased China's competitiveness.

Recent trade friction with Japan over chemical residues on Chinese vegetables could prompt changes in production practices and greater inspection. These added costs could reduce China's competitiveness. However, with its low labor costs, China will likely continue to be a formidable competitor with the United States in Japan, particularly for fresh vegetables. *W*

**Sophia Wu Huang,** sshuang@ers.usda.gov

### This finding is drawn from . . .

A broader ERS study of the global patterns of trade in fruits and vegetables and other reports, including *China Increases Exports of Fresh and Frozen Vegetables To Japan*, by Sophia Wu Huang, VGS292-01, August 2002, available at: [www.ers.usda.gov/publications/vgs/aug02/vgs292-01/](http://www.ers.usda.gov/publications/vgs/aug02/vgs292-01/)